



# Collecting data to determine the best dressing of the CVC exit site

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## Introduction

Arteriovenous fistulae are the preferred vascular access type for haemodialysis, followed by arteriovenous grafts. However, when these access types are not available, a central venous catheter (CVC) is used.

The main issue with patients with a CVC is that they are more susceptible to catheter exit site-related infections which are in turn associated with increased morbidity, mortality, and costs.

## Objectives

To evaluate CVC outcomes focusing on the type of dressing and dressing replacement frequency with careful assessment of complications and integrity.

## Methods

We evaluated the data collected in a clinical database regarding the type of dressing used and dressing replacement frequency.

All statistical analyses were performed using the SPSS software (SPSS V19).

## Results

Data of 7,029 CVC patients were analysed. Mean age 64.93±15.06; female 50.16%. Investigation period: 01.01.2014 - 31.12.2016.

Dressing types used were divided as follows:

- gauze dressing 59.6%
- transparent dressing 38.7%
- no dressing used / other dressing 1.7%

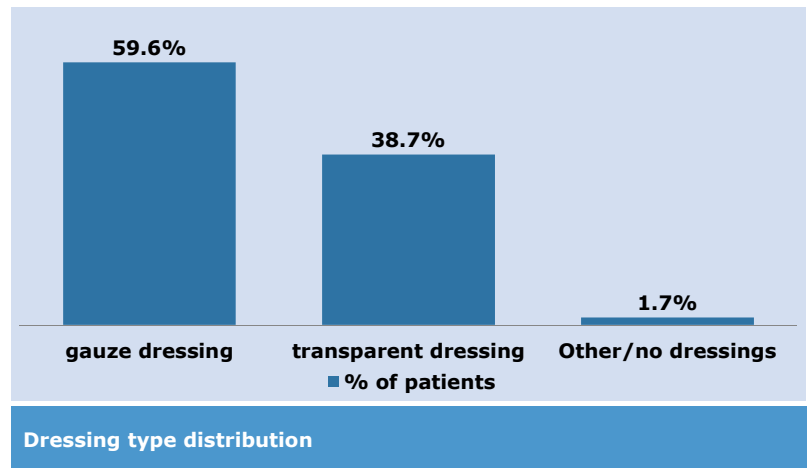
The transparent dressing was associated with a significantly higher risk of both catheter-related bloodstream infections (HR 1.47; 95% CI 1.03-2.10, p=0.03) and CVC failure (HR 1.13; 95% CI 1.00-1.27, p=0.04) as compared to the gauze dressing.

## Results

Although earlier studies report a lower risk of catheter-related bloodstream infections for the transparent dressing as compared to gauze dressing, our findings were statistically significantly different. Therefore, further studies are required to evaluate the outcomes of the CVC patients to evaluate how exit site care can be individualised and optimised to reduce morbidity and mortality and increase the quality of life in this population.

## References

1. Rita L. McGill, Eduardo Lacson Jr., "Sex, race, and hemodialysis vascular access processes", J Vasc Access 2016; 00 (00): 000-000 - DOI: 10.5301/jva.5000657



Parameter	Category	Reference	HR	95% CI		p value
Gender	Female	Male	0.752	0.552	1.024	0.049
Age	18-50 years	50-65 years	1.545	0.923	2.584	0.097
	65-75 years		1.703	1.107	2.622	0.015
	> 75 years		1.270	0.809	1.992	0.297
Dressing Type	Transparent Dressing	Gauze Dressing	1.478	1.036	2.108	0.031
Dressing Frequency	Every Treatment	Twice per week Weekly	2.476	0.911	6.727	0.075
			0.790	0.511	1.222	0.290

Parameter	Category	Reference	HR	95% CI		p value
Gender	Female	Male	0.831	0.754	0.918	<0.001
Age	18-50 years	50-65 years	1.005	0.862	1.172	0.941
	65-75 years		1.076	0.948	1.221	0.254
	> 75 years		0.807	0.703	0.926	0.002
Dressing Type	Transparent Dressing	Gauze Dressing	1.133	1.008	1.273	0.036
Dressing Frequency	Every Treatment	Twice per week Weekly	1.500	1.008	2.231	0.046
			0.725	0.625	0.842	<0.001

Cox model with primary outcome CVC failure